Application No.: 10/523,556
Amendment Dated: March 27, 2008
Reply to Office Action of: January 14, 2008

Remarks/Arguments:

Claims 1-9 are pending. Claims 1-9 stand rejected. Applicants acknowledge with appreciation the indication that claim 8 would be allowable if rewritten in independent form and if the Section 112, second paragraph, objections are addressed. In view of the amendments and arguments below, Applicants believe that rewriting claim 8 into independent form is not necessary.

In this response, Applicants have amended claims 1, 6 and 9. Accordingly, claims 1-9 are presented for reconsideration.

Claims 1 and 9 stand rejected under 35 U.S.C. § 103(a) as obvious over the combination of Furui (U.S. Patent No. 6,652,001) and Kimura (U.S. Patent No. 5,373,226). Claims 2-7 stand rejected under 35 U.S.C. § 103(a) as obvious over the combination of Furui, Kimura and Masegi et al. (U.S. Patent No. 5,045,835).

Applicants respectfully request reconsideration. In particular, Applicants' invention, as recited by claim 1, includes a feature which is neither disclosed nor suggested by the art of record, namely:

... a compulsory operating section for operating the power supply section, wherein the power supply section is operated for a given time and an operating status of the power supply section is monitored during a normal operation of the battery.

In the exemplary embodiment disclosed in Applicants' specification, this means that while the battery is operating normally, the compulsory operating section operates the power supply for some specific period of time. This feature may be found, for example, in the originally filed application at page 7, lines 20-24 and page 8, lines 13-15. No new matter has been added.

Furui relates to a passive safety device for a vehicle. As shown in FIG. 1, the device relevantly includes a battery 1, a backup capacitor 32, a microcomputer 24 and a nonvolatile memory 35. After the battery 1 fails, the backup capacitor 32 supplies a voltage to the microcomputer 24 and the nonvolatile memory 35. See col. 5, lines 28-34. Further, when the battery 1 fails, the microcomputer 24 writes data in the

Application No.: 10/523,556
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nonvolatile memory 35 after a predetermined time. If, when the microcomputer turns back on, the data is stored in the memory, this indicates that the backup capacitor 32 is working normally. If the data is not stored in the memory, this indicates that the

backup capacitor 32 is not working normally. See col. 6, lines 3-14.

The Examiner argues that Furui discloses monitoring the power supply section during a normal operation of the battery. Furui's device, however, is incapable of monitoring a power supply section during a normal operation of the battery. In particular, as described above, the data is only stored in memory after the battery fails. Thus, the integrity of the backup capacitor 32 is only tested after the battery fails and not during a normal operation of the battery. Further, Furui's disclosure is limited to storing data in memory and, when the microcomputer turns back on, checking whether the data was stored in memory. Merely checking whether data is stored in memory is not monitoring the power supply section during normal operation of the battery. Accordingly, Furui does not disclose "an operating status of the power

As the Examiner recognizes, Furui also does not disclose "a compulsory operating section." Accordingly, Furui also does not disclose "a compulsory operating section for operating the power supply section, wherein the power supply section is operated for a given time," as required by claim 1.

supply section is monitored during a normal operation of the battery," as required.

Kimura relates to a constant voltage circuit formed of MOSFETs. The circuit includes a reference voltage generator 1 and an error amplifier 2. Voltage generator 1 is a circuit used to obtain a reference voltage V_{REF} which is supplied to the error amplifier 2. See, e.g., col. 9, lines 45-50.

The Examiner argues that Kimura's reference voltage generator 1 reads on Applicants' compulsory operating section. Kimura is silent, however, with respect to reference voltage generator 1 operating the error amplifier 2 "for a given time." Thus, even assuming, arguendo, that error amplifier 2 could be read as a power supply section, Kimura does not disclose "a compulsory operating section for operating the power supply section, wherein the power supply section is operated for a given time," as required by claim 1 (emphasis added). Further, Kimura is silent with respect to "an

Application No.: 10/523,556 Amendment Dated: March 27, 2008

Reply to Office Action of: January 14, 2008

operating status of the power supply section is monitored during a normal operation of the battery," as required by claim 1.

It is <u>because</u> Applicants include the feature of "a compulsory operating section for operating the power supply section, wherein the power supply section is operated for a given time and an operating status of the power supply section is monitored during a normal operation of the battery," that the following advantages are achieved. Namely, a backup power supply for a system may be operated while the main power supply is operating normally to monitor whether the backup power supply is functional. Thus, it may be determined whether the backup power supply will fail before the backup power supply is needed to power the system.

Accordingly, for the reasons set forth above, claim 1 is patentable over the art of record.

With respect to the rejection of claims 2-7 and 9, Masegi et al. fails to make up for the decencies set forth above with respect to Furui and Kimura. Claims 2-7 and 9 include all the features of allowable claim 1 from which they depend. Thus, claims 2-7 and 9 are also patentable over the art of record for the reasons set forth above.

The specification and claims 1 and 9 have been amended as required by the Examiner to comply with the recited informalities.

The material in the specification that the Examiner found contradictory with respect to the feature of "a power supply section for allowing the capacitor unit to power the electronic controller when the battery operates...normally," as recited in claim 1, has been deleted from the specification as required. Further, claim 1 has been amended to clarify the structure of the "compulsory operating section" recited in claim 1. Claims 1-9 are fully compliant with the second paragraph of 35 U.S.C. § 112. Accordingly, withdrawal of these rejections to claims 1-9 is respectfully requested.

Claim 6 has been amended to clarify that "whether or not the power supply section is defective is carried out periodically," as required. Claim 6 is fully compliant with the second paragraph of 35 U.S.C. 112. Accordingly, withdrawal of this rejection to claim 6 is respectfully requested.

10/523,556

Amendment Dated: March 27, 2008 Reply to Office Action of: January 14, 2008

In view of the amendments and arguments set forth above, the aboveidentified application is in condition for allowance which action is respectfully

Respectfully submitted,

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requested.

Attachments: Substitute Specification

Marked-up Substitute Specification

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